

Claims

1.-8. (cancelled)

9. (new) A method for adapting link weights in a communication network formed with links for an optimized traffic distribution within the communication network in respect of a traffic volume expected for the communication network and in relation to a parameter relating to the link usage, the method comprising:

a) assigning start values for the link weights to the links of the communication network;

b) calculating paths for routing of traffic within the communication network on the basis of the link weights;

c) determining the values of the parameter for the links using the calculated paths and the expected traffic volume;

d) determining such link for which the parameter has the highest value; and

e) increasing the link weight for the determined link, wherein

f) the steps b), c), d) and e) are repeated until the value of the parameter for the determined link is higher than the parameter value for the determined link relative to a preceding step d), wherein

the steps a) to f) are performed with the aid of a data processor.

10. (new) The method in accordance with claim 9, wherein the parameter is produced by an absolute traffic load, a relative traffic load related to link bandwidth traffic-related costs arising for using the link, a link availability, a delay time of the relevant link, or the load capabilities of an end node of the relevant link.

11. (new) The method in accordance with claim 9, wherein the

start values for the link weights are the same for all links.

12. (new) The method in accordance with claim 10, wherein the start values for the link weights are the same for all links.

13. (new) The method in accordance with claim 9, wherein the paths are calculated using the OSPF (open shortest path first) protocol or the IS-IS (Intermediate System - Intermediate System) protocol.

14. (new) The method in accordance with claim 10, wherein the paths are calculated using the OSPF (open shortest path first) protocol or the IS-IS (Intermediate System - Intermediate System) protocol.

15. (new) The method in accordance with claim 11, wherein the paths are calculated using the OSPF (open shortest path first) protocol or the IS-IS (Intermediate System - Intermediate System) protocol.

16. (new) The method in accordance with claim 9, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

17. (new) The method in accordance with claim 10, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

18. (new) The method in accordance with claim 11, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost

Multi Path) concept.

19. (new) The method in accordance with claim 13, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

20. (new) The method in accordance with claim 9, wherein the link weights and their increase are always expressed by whole numbers.

21. (new) The method in accordance with claim 10, wherein the link weights and their increase are always expressed by whole numbers.

22. (new) The method in accordance with claim 11, wherein the link weights and their increase are always expressed by whole numbers.

23. (new) The method in accordance with claim 9, wherein the link weight is increased for both directions of transmission of the link for the link determined.

24. (new) The method in accordance with claim 10, wherein the link weight is increased for both directions of transmission of the link for the link determined.

25. (new) The method in accordance with claim 11, wherein the link weight is increased for both directions of transmission of the link for the link determined.

26. (new) The method in accordance with claim 9, wherein the expected traffic volume is described by the traffic matrix.

27. (new) The method in accordance with claim 10, wherein the expected traffic volume is described by the traffic matrix.